

**RESPONSE TO PUBLIC COMMENTS ON
TENTATIVE DETERMINATIONS TO EXTEND VARIANCES
FOR COMBINED SEWER OVERFLOW DISCHARGES
TO
ALEWIFE BROOK/UPPER MYSTIC RIVER
AND
LOWER CHARLES RIVER/CHARLES BASIN**

GENERAL COMMENTS

1) Comment:

There should not be a presumption that the proposed Variance Extensions will be reissued back-to-back to the year 2020.

MassDEP Response:

As phases of the required Long Term CSO Control Plan (LTCP) are implemented and new water quality data is collected and pollution abatement cost information is updated, collectively, the reissuance process for NPDES permits for MWRA, Cambridge, Boston, and Somerville, and the consideration for reissuance of the Variance Extensions in a public process every three years, and the ongoing review of the Federal Court Order compliance and progress, all provide opportunities to reevaluate the need for the Variance Extensions and the conditions of the Variance Extensions, including additional restrictions on CSO discharges, as appropriate.

EPA approved the Variance Extensions through 2020 subject to specific requirements and based on an understanding that MassDEP would hold public hearings. The Variances acknowledge that it is not feasible to attain Class B water quality standards within the term of the Variances and at the same time the Variances ensure progress of implementation of the LTCP.

2) Comment:

The Fact Sheets do not explain the regulatory basis for granting the request to reissue the Variances.

MassDEP Response:

The Fact Sheet for the Tentative Determination to Extend the Variance for CSO Discharges to the Alewife Brook/Upper Mystic River Basin explains the regulatory basis for issuance of the Variance. See, for example, the discussion of substantial and widespread social and economic impact and citations to 314 CMR 4.00, on pages 9 through 11 of the Fact Sheet. The Tentative Determination to Extend the Variance also cites the legal basis for its issuance in accordance with Massachusetts Surface Water Quality Standards at 314 CMR 4.00.

Based on the analysis completed by MWRA thus far, MassDEP determined that proceeding at this time controls necessary for full attainment of Class B water quality standards would result in substantial and widespread social and economic impact as those terms are used in 40 CFR 131.10 (g) (6). EPA agrees that, based on existing information, it may not be feasible to attain Class B water quality standards for primary contact recreation prior to 2020.

3) Comment:

Notification in the variance process should include a response to comments document.

MassDEP Response:

All final Variance documents will be sent to all those who provided comments and this Response to Comments document will be available to public on the MassDEP website and it will be sent to all those interested parties that request it.

4) Comment:

CSO affordability analysis is flawed.

MassDEP Response:

Information to support this was not provided. The affordability analysis has been conducted in accordance with MassDEP procedures.

5) Comment:

MWRA I/I data should be reported for responses to different size storms.

MassDEP Response:

MWRA flow data is available to the communities for use in evaluating the performance of their systems, however, the metering and data collection program was not specifically designed for solving wet weather problems in community systems. Communities will need to perform more comprehensive Sewer System Evaluation Surveys on their own systems to identify the sources of excessive infiltration and inflow.

6) Comment:

The Variance for the Alewife Brook/Upper Mystic River and the variance for the Lower Charles River/Charles Basin are inconsistent in the reporting requirements. The Lower Charles River/Charles Basin Variance only requires annual reporting while the Alewife Brook/Upper Mystic River Variance requires quarterly reporting.

MassDEP Response:

The Lower Charles River/Charles Basin and the Alewife Brook/Upper Mystic Basin Final Variance Extension will require reporting on an annual basis.

ALEWIFE BROOK/UPPER MYSTIC RIVER VARIANCE EXTENSION
COMMENTS

7) Comment:

The Public Hearing times and location were not responsive to the needs of all the affected parties.

MassDEP Response:

At the request of the Mystic River Watershed Association an evening hearing session was added to the originally scheduled public hearing at Somerville City Hall and the Department extended the comment period. Some requests for additional hearings at alternate locations were not received until after the public hearing date. Somerville was chosen as the hearing site because it is centrally located between the Charles River and Alewife Brook/Mystic River watersheds. As mentioned, a night hearing was added, however, no public testimony was provided at this second hearing. The purpose of hearing is to receive testimony and the opportunity to provide written testimony was extended until August 2, 2007, after the Public Notice first appeared in the Environmental Monitor on June 11 and the Boston Globe on June 18.

8) Comment:

The Department is not authorized to adopt a water quality standard, and the variance is a water quality standard, without the approval of the Massachusetts Department of Public Health (“DPH”) when the standard “relates to the public health.” G.L. c. 21§27(5). The CSO discharges can create a nuisance condition in Alewife Brook and affect public health.

MassDEP Response:

The MA Surface Water Quality Standards (WQS), 314 CMR 4.00, which DEP revised in December, 2006,¹ and which the MA Department of Public Health approved, sets out the process for the issuance of a variance under those regulations. The WQS also specify the process for the designation of a partial use and for the removal of a use. With respect to such decisions, the WQS state, in part, as follows:

"Prior to removal of a use or the designation of a partial use, the Department shall provide public notice and the opportunity for a public hearing in accordance with M.G.L. c. 30A and the applicant shall submit to the Department the information necessary for completion of a Use Attainability Analysis. The Department may grant a variance for a specified period of time for a particular discharger and for specific

¹ The WQS revisions that the Department promulgated in December 2006, are awaiting EPA approval.

pollutants so that it can be determined through a Use Attainability Analysis whether uses can be attained. A variance applicant shall submit to the Department a detailed assessment of the types of information that will be needed for completion of the Use Attainability Analysis. A variance may be granted only for the pollutants causing noncompliance with criteria and all other provisions of 314 CMR 4.00 apply for the term of the variance. Prior to granting a variance, the Department will provide or require public notice and provide an opportunity for a public hearing in accordance with 314 CMR 2.00...." See 314 CMR 4.03(4).

See also 314 CMR 4.06(1)(d)11, which similarly provides that for partial use and B(CSO) and SB(CSO) designations, the regulations must be revised pursuant to M.G.L. c. 30A. Relative to variances, 314 CMR 4.06(1)(d)11 states: "Other combined sewer overflows may be eligible for a variance granted pursuant to 314 CMR 4.03(4)."

The WQS make a distinction between the process for partial use, removal of a use, and an SB/B(CSO) designation, on the one hand, all of which would trigger the requirement for a WQS revision, and the process for a variance, on the other hand, which, instead, is subject to the procedures set out in 314 CMR 2.00. 314 CMR 2.00, among other things, provides for public notice and requirements for public hearing.

The previous version of the WQS likewise made a distinction between the process for partial use and removal of a use and that applicable to a variance. Under that version of the WQS, a partial use and removal of a use both triggered public notice and hearing requirements in accordance with M.G.L. c.30A. Relative to variances for CSO's, those regulations stated, in part: "Other combined sewer overflows may be eligible for a variance granted through permit issuance procedures." See 314 CMR 4.03(4) and 314 CMR 4.06(1)(d)10 of those regulations.

The WQS take different approaches to variances versus partial use, B/SB(CSO) designations and removal of a use. While the latter designations are viewed as being more permanent, variances, although they can be lengthy and be extended, still are viewed as being temporary in nature. In the case of a variance, no determination has been made yet as to whether uses ultimately can be attained. Once such a determination has been made, and if it were to be determined that uses could not be attained, then the requirement for a WQS revision would be triggered. Under the MA Clean Waters Act, M.G.L. c. 21, § 26 through 53, a WQS revision would require prior approval of the MA Department of Public Health.

In the case of the CSO discharges to Alewife Brook/Upper Mystic River, there has been no determination as to whether uses ultimately can be attained and no redesignation of these receiving waters is being made at this time. Accordingly, the variance is being issued pursuant to the variance procedures in 314 CMR 4.00. Under those procedures, a regulation revision and MA Department of Public Health approval are not required.

Relative to floatables control, MWRA is required under the federal court order to implement floatables control in both the Charles and Mystic River watersheds at CSO discharge locations. Design for floatables control in the Alewife Brook watershed includes continuous deflection separators, screens, and underflow baffles. The federal court order requires completion of these facilities by December 2008.

9) Comment:

The Tannery Brook proposed solution suggests modifying the connection between Tannery Brook Drain and MWRA's Alewife Interceptor. This conclusion should be supported by data to be provided by the City of Somerville.

MassDEP Response:

Enlarging the interceptor connection from the Tannery Brook Drain to 30 inches was evaluated and supported in the MWRA's Notice of Project Change for the Long-term CSO Control Plan for Alewife Brook in April 2001. The project has been included in the federal court order.

MassDEP is also requiring the City of Somerville to update the City's "Sewer Assessment Report" of February 2007, prepared by Camp, Dresser & McKee, Inc. to provide additional detail on the additional CSO abatement alternatives, and floatables control alternatives at SOM 01A. The report must also include a discussion of illicit connections in Two Penny Brook watershed, along with conclusions, recommendations, and cost estimates to correct any deficiencies identified. The revised draft must address infiltration/inflow contributions as an input in the analysis. MassDEP will be working with the City of Somerville to resolve these issues.

10) Comment:

There should be a modification to the notification process at the CSO Outfall, CAM 401B to include automated notification by electronic signal. This method of notification should be provided to Arlington Board of Health and subscribers. The Variance Conditions should require enhanced public notification including real-time email or phone notification to recipients that request it and include notification of schools.

MassDEP Response:

The current notification process for CSO Discharges, is as follows:

"iv. The City of Cambridge, in collaboration with MWRA and Somerville, shall provide e-mail notice to EPA, the Department, local health agents and the Mystic River Watershed Association of CSO discharge events in the Alewife Brook watershed within 24 hours of the onset of the discharge."

Any notification to property owners should be initiated at the local level. Since the current system requires notification within 24 hours to local health agents and the Mystic River Watershed Association, MassDEP recommends that the local health departments coordinate with affected property owners to establish a mechanism to relay notifications at the local level. The Arlington Health Director is included in this notification. The Mystic River Watershed Association receives notification within 24 hours to assist in providing notification to local property owners, as well. Further dissemination of this information can occur through interaction with the local health officials, including providing automatic forwarding of email notification from the local health department and/or the MyRWA to those individuals that request the email notification.

11) Comment:

The TMDL for bacteria in the Alewife Brook/Upper Mystic River should be completed and an analysis of the progress towards complying with the TMDL should be part of an assessment of the LTCP by 2010.

MassDEP Response:

The Department has developed a draft bacteria TMDL for the Boston Harbor. The TMDL is based on the assumption that all discharges to any surface water must meet the standard at the point of discharge, although compliance will be measured in stream. For CSO's, the TMDL defers to the approved Long-Term Control Plan. The implementation phase for CSO abatement must proceed in order that a final determination of the water quality standard can be made. Therefore, the Variance Extension for the Alewife Brook/Upper Mystic River Basin is being reissued to allow the LTCP to proceed.

12) Comment:

CSO's, SSO's, and stormwater should be dealt with together and MassDEP and EPA need to work on stormwater issues including pollutants and flow attenuation.

MassDEP Response:

MassDEP acknowledges that all of these interrelated sources need to be properly managed to achieve significant water quality improvements. MassDEP is collaborating with EPA to take actions to address pollutants from all of these identified sources: CSO abatement projects, illegal stormdrain connection removal projects, and SSO abatement projects (i.e. infiltration/inflow projects), are all moving forward concurrently. Most of the communities in these watersheds have already initiated actions in this regard. Where SSO's have been identified as a problem, MassDEP has been working with the municipality in addressing infiltration/inflow, in some cases through enforcement actions.

13) Comment:

Does rising Alewife Brook backflow through storm drains into combined system?

MassDEP Response:

MassDEP will take actions to determine if Alewife Brook flows are flowing into the sewer system and contributing to surcharging and/or sewer overflows. If it is determined that during certain storm events that the Alewife Brook rises to a point where it flows into the combined system, appropriate regulatory actions will follow based on the information gathered.

14) Comment:

Floodgates should be installed on storm drains to reduce street flooding.

MassDEP Response:

Storm drains are the responsibility of the Cities and there may be instances where floodgates could attenuate flooding up through storm drains, however, these flooding issues are not the subjects of the Variance.

15) Comment:

Is there still an SSO near Alewife Brook Pump Station?

MassDEP Response:

MWRA (as any sewer authority) is required to notify MassDEP within 24 hours for any SSO discharge, including a discharge at the site of the Alewife Brook Pump Station.

16) Comment:

Can separated stormwater go to Millers River and not MWRA combined sewer?

MassDEP Response:

Terminal drainage structures to the Millers River are operated by MBTA, on the site of the Boston Engine Terminal. These structures have not operated effectively for many years, and only allow limited stormwater discharge to the Millers River from the upstream drainage areas. MassDEP and MBTA recently reached agreement on an Administrative Consent Order that requires MBTA to restore capacity in the drainage system. This should provide improved drainage conditions for upstream separated drainage areas in Somerville.

17) Comment:

MWRA should use more current data to refine and update the CSO activation model.

MassDEP Response:

MWRA has indicated that the model is updated to account for all upgrades to the wastewater conveyance system, and any “new” information developed for the system as a result of further field investigations. MassDEP will continue to review the MWRA system model.

18) Comment:

The model used to predict CSO activations should be more accurate and more metering should be required.

MassDEP Response:

MassDEP will require installation of a meter at SOM 01A, which shall provide complete meter coverage for CSO’s in the Alewife watershed. MassDEP will review with MWRA the metering data and the annual modeled estimates of CSO discharges, to identify discrepancies, and work with MWRA toward resolving any inaccuracies in the system model.

19) Comment:

The receiving water monitoring program requirements should be modified to be consistent with the ongoing program, as it has been implemented.

MassDEP Response:

MWRA will post their annual receiving water monitoring plan on their website each year. MassDEP will review the plan to ensure that it meets the goal of evaluating water quality in the Charles and Alewife watersheds where there are CSO impacts and changes will be made, where appropriate.

20) Comment:

The Variances should address the clean-up of floatables after CSO activations.

MassDEP Response:

MWRA is required under the federal court order to implement floatables control in both the Charles and Mystic River watersheds at CSO discharge locations. Design for floatables control in the Alewife Brook watershed includes continuous deflection separators, screens, and underflow baffles. The federal court order requires completion of these facilities by December 2008.

21) Comment:

The Variance requirements should become part of the NPDES permit requirements.

MassDEP Response:

MassDEP anticipates that upon reissuance of the NPDES permit the conditions of the Variance will be specifically included in the permit or referenced as a requirement of

the permit. The Variance, at the bottom of Page 1, specifically states that a violation of the Variance shall constitute a violation of the NPDES permit and the Massachusetts Water Quality Standards.

22) Comment:

The Fact Sheet should not imply that the Use Attainability Analysis is complete.

MassDEP Response:

The Fact Sheet states that the decision on Use Attainability is only deferred. Issuance of a Variance does not require a Use Attainability Analysis.

23) Comment:

There should be an opportunity for public comment on documents developed and submitted to the regulatory agencies.

MassDEP Response:

MyRWA may contact the permittees or Department for copies of any reports, which are part of the public record. The Department will consider any comments received from the public on these documents. Comments received may be considered at the time of the Department review of the documents or for consideration in the evaluation of the terms and conditions in the reissuance of the Variance in three years, as appropriate.

24) Comment:

Variance Condition C.iv. should be modified to include reporting of CSO discharges in the entire Mystic River watershed not just Alewife Brook.

MassDEP Response:

The language of C.iv. has been corrected to require reporting of all CSO discharge events in the entire Mystic River watershed, including Alewife Brook.

25) Comment:

CSO discharges should be required to be consistent with Revised Recommended Plan, as characterized in July 1, 2003 MWRA Final Variance Report.

MassDEP Response:

The CSO Variance requires that MWRA achieve the level of control in the 2003 Final Variance Report, upon completion of the recommended plan.

26) Comment:

Variance Conditions B.ii and B.iii appear to have been addressed already.

MassDEP Response:

As more information is gathered in each community system, there may be enhanced opportunities for additional, cost-effective, I/I removal. The Variance will continue to include a requirement that the MWRA work with their member communities in this regard.

27) Comment:

As a condition of the Variance, the Long Term CSO Control Plan should be required to include the complete elimination of CSO's.

MassDEP Response:

Based on costs, it appears infeasible, at this time, to eliminate all CSO's as part of Long Term CSO Control Plan. The triennial review process for the Variances in combination with updated data will determine ultimately whether higher levels of CSO controls are feasible in the future.

28) Comment:

There should be a requirement to establish a CSO Discharge Clean-up Fund.

MassDEP Response:

It is not within the Department's authority to require this type of fund.

29) Comment:

The Variances should require compliance with the Nine Minimum Controls.

MassDEP Response:

On page 2 of the CSO Variance, Condition B.i. specifically requires MWRA, the City of Somerville, and the City of Cambridge to implement the Nine Minimum Controls, as does the NPDES permit for each permittee.

30) Comment:

The annual press release should provide more information.

MassDEP Response:

Detailed updated information on CSO's and the CSO abatement program can be accessed by contacting the MWRA at 617-788-1170 or by visiting their web-site at www.mwra.state.ma.us or by visiting the Cities of Cambridge and Somerville websites at <http://www.cambridgema.gov/TheWorks/> and www.ci.somerville.ma.us. Updated information on water quality in the Alewife Brook watershed can be found at the Mystic River Watershed Association (MyRWA) website, www.mysticriver.org

and at a “real-time” site co-sponsored by the City of Somerville and MyRWA at www.mysticriveronline.org.

LOWER CHARLES RIVER/CHARLES BASIN VARIANCE EXTENSION COMMENTS

31) Comment:

BOS 046 should report activations and volumes.

MADEP Response:

Both MWRA and Boston Water & Sewer Commission are required to report activations and volumes annually for this outfall.

32) Comment:

Variance Condition B.ii., concerning activities intended to reduce excessive Infiltration and Inflow (“I/I”), should be modified to be consistent with Alewife Brook/Upper Mystic River Variance, which requires MWRA to work with EPA and MassDEP, in addition to communities.

MADEP Response:

The final Variance document has been modified to reflect this change.